DOCUMENT RESUME

ED 479 245 IR 022 035

AUTHOR	Da, Jun
TITLE	The Use of Online Courseware in Foreign Country Instruction and Its Implication for Classroom Pedagogy.
PUB DATE	2003-04-00
NOTE	10p.; In: Teaching, Learning, & Technology: The Challenge Continues. Proceedings of the Annual Mid-South Instructional Technology Conference (8th, Murfreesboro, Tennessee, March 30-April 1, 2003); see IR 022 027.
AVAILABLE FROM	For full text: http://www.mtsu.edu/~itconf/proceed03/146.html/.
PUB TYPE	Reports - Evaluative (142) -- Speeches/Meeting Papers (150)
EDRS PRICE	EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS	Educational Technology; *English (Second Language); Foreign Countries; Higher Education; *Instructional Design; Learning Activities; Online Systems; *Second Language Instruction; Tables (Data); Technology Uses in Education; Use Studies; *Web Based Instruction; World Wide Web
IDENTIFIERS	China

ABSTRACT

This presentation analyzes learners' online learning behavior based on statistics collected from an ESL (English as a Second Language) learning system and demonstrates the need and feasibility of focusing classroom instruction more on productive skills, such as speaking that cannot be handled satisfactorily by current technologies. The NHCE (New Horizon College English) online learning system, an EFL (English as a Foreign Language) course management and learning system developed for non-English major postsecondary students in China, is described. Topics covered include system design, pedagogical design, and EFL learning objects; three figures present the organization of online instruction at NHCE, student online learning activities, and instructional activities performed by course instructors. User online behavior is then addressed, including: visits, page views, and hits; visit duration; and most frequently viewed pages. (MES)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 479 245

The Use of Online Courseware in Foreign Country Instruction and Its Implication for Classroom Pedagogy

By: Jun Da

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

R.C. Jones

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

IR022035

BEST COPY AVAILABLE

Eighth Annual
Mid-South Instructional Technology Conference
Teaching, Learning, & Technology
The Challenge Continues
March 30-April 1, 2003

2003 Conference Proceedings

The Use of Online Courseware in Foreign Country Instruction and Its Implication for Classroom Pedagogy

By: Jun Da
Track 1 - Effective Technology Based Learning Environments
Interest: General :: Lecture/Presentation :: Level: All

Abstract

In foreign language instruction, classroom activities are typically organized to facilitate the acquisition of both receptive and productive skills. However, with the increasing use of interactive online learning materials delivered through course management systems, we need to adapt our instructional pedagogy accordingly. In this presentation, we analyze learners' online learning behavior based on statistics collected from an ESL learning system and demonstrate the need and feasibility of focusing our classroom instruction more on productive skills such as speaking that cannot be handled satisfactorily by current technologies.

Proceeding

1. Introduction

In a typical college foreign language classroom, learning activities are often organized to facilitate learner's development of both receptive (reading and listening) and productive skills (speaking and writing). Receptive skill training is often conducted with the class as a whole or in groups, where an instructor assigns reading (as well other) materials for his/her students and checks their comprehension by providing relevant feedback. In comparison, activities involving the development of productive skills often take the form of one-on-one interaction. In the case of writing, for example, an instructor needs to spend considerable time reading and evaluating individual learner's writing samples and provide feedback. In the case of speaking practices, again, learners often need one-on-one interaction with the instructor. Because of the requirement of individualized attention in the development of those productive skills, it is not unusual for us to find that less classroom time is spent on activities related to those skills, even though they are equally important in the development of a learner's overall language competence.

One possible solution to this time constraint problem is to seek the help of online language instructional courseware, especially those interactive learning materials delivered through course management systems where students' learning process can be evaluated and tracked. In this presentation, we provide a case study of New Horizon College English Online (henceforth NHCE, http://www.nhce.edu.cn), an

online EFL (English as a Foreign Language) course management and learning system specially developed for non-English major postsecondary students in China. The NHCE system is intended for classroom-based instruction where students are engaged primarily through self study and supplemented by instructor-led learning. In this presentation, we will first describe its system design and functions for language learning and instruction. We will then provide a brief analysis of user online behavior based on web statistics collected during the first four months of its operation. Based on the statistics, we suggest that by incorporating online interactive learning materials into the overall language instruction curriculum, it is feasible for instructors to reduce classroom time on activities that develop those receptive skills which can be handled adequately by the online system. With reduced requirement on classroom time on receptive skills development, an instructor, in turn, can shift the focus of classroom instruction on productive skills that cannot be handled adequately with current computer technology.

2. The NHCE online learning system

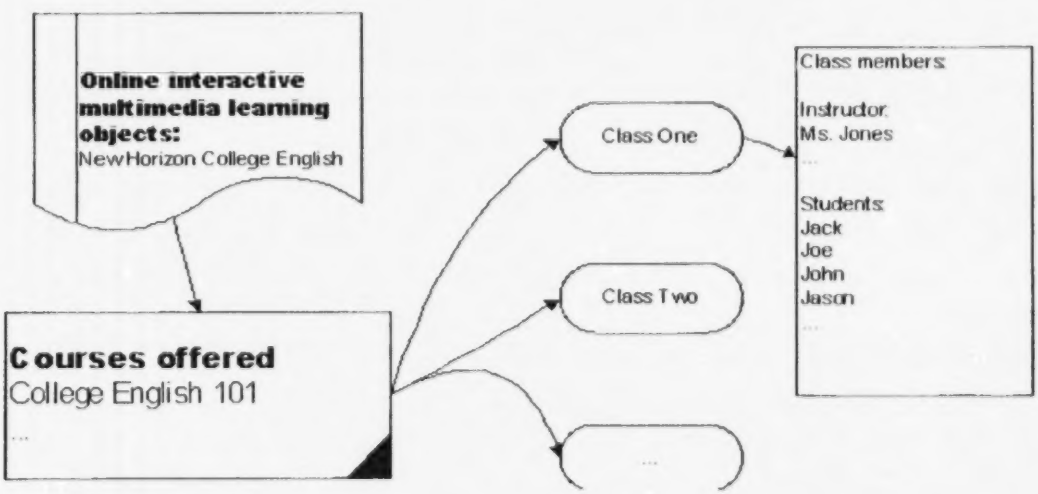
2.1 System design

New Horizon College English Online consists of both a course management system and online EFL learning objects. Similar to other popular course manage systems (e.g., WebCT and Blackboard, etc.), it comes with both administrative and instructional tools. Its administrative tools include those for user account management, course setup and configuration, and communication. Instructional tools include class membership management, file manager, and asynchronous communication tools such as bulletin board and group email that can be used by instructors to organize online learning activities.

However, unlike most course management systems (such as WebCT and Blackboard) where instructors have to provide course learning content by themselves, NHCE comes with built-in modules of EFL learning materials. That is, both multimedia and interactive learning contents are provided for its users. When a student practices with online exercises such as multiple-choice questions and short-answer questions, his/her responses can be evaluated instantly and feedback is provided. At the same time, user data is stored in the back-end server database so that instructors can retrieve and analyze them at a later time.

2.2 Pedagogical design

Online learning and instruction at NHCE is organized in terms of 'courses' and 'classes' at each individual institution. A class is simply an organizing unit that consists of instructors and students. The relationship among the online learning content, course and class is shown as follows (Figure 1).



BEST COPY AVAILABLE

Figure 1 Organization of online instruction at NHCE

Online learning at NHCE is designed to be learner-centered, i.e., students control when, what and how to learn. At the same time, an instructor provides assistance and guidance when necessary. The following diagram (Figure 2) demonstrates the various learning activities a student can engage in at the NHCE website.

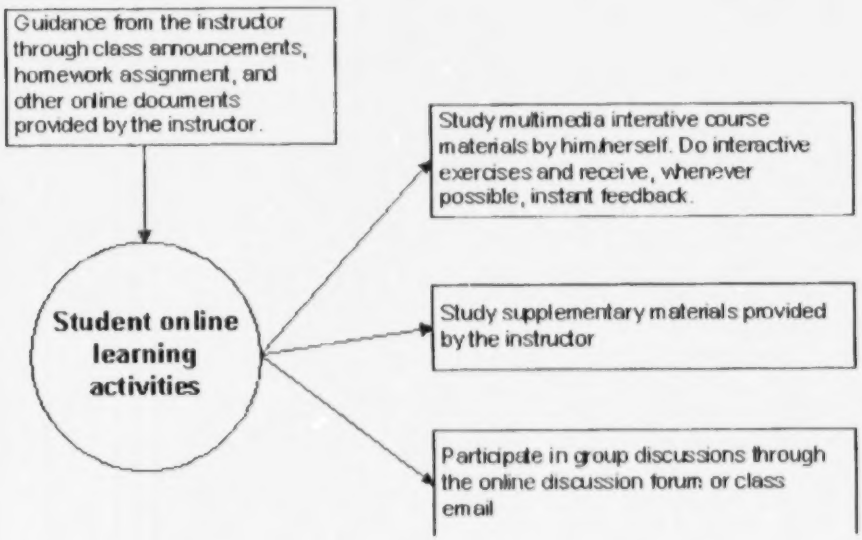

Guidance from the instructor through class announcements, homework assignment, and other online documents provided by the instructor.
Student online learning activities
Study multimedia interative course materials by him/herself. Do interactive exercises and receive, whenever possible, instant feedback.
Study supplementary materials provided by the instructor
Participate in group discussions through the online discussion forum or class email

Figure 2 Student online learning activities at NHCE

Note that at NHCE students' interaction with the system can be either one-way or two-way. They can click on a link and view the relevant content (such as reading a passage). They can also engage in interactive learning activities such as participating in group discussions and doing online interactive exercises.

To facilitate online instruction, NHCE provides several teaching tools for instructors that include document editor, file manager, communication tools, and student learning recording manager, etc. Figure 3 lists possible course management and instructional activities that an instructor can perform at NHCE:

BEST COPY AVAILABLE

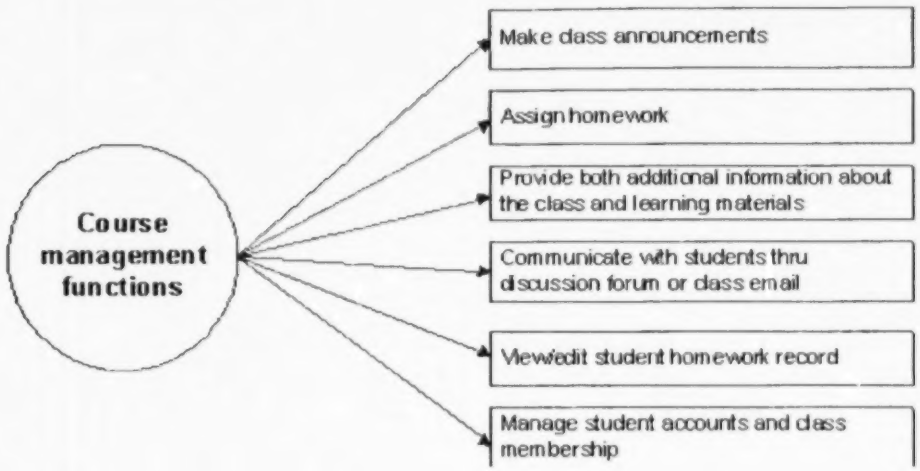

Course management functions
Make class announcements
Assign homework
Provide both additional information about the class and learning materials
Communicate with students thru discussion forum or class email
View/edit student homework record
Manage student accounts and class membership

Figure 3 Instructional activities performed by course instructors

2.3 EFL learning objects

One thing that sets NHCE apart from other course management systems (such as WebCT and Blackboard, etc.) is its built-in EFL learning objects, which include both multimedia materials and interactive exercises that provide training in reading and listening skills, vocabulary and grammar. In particular, server-side scripting technology has been used in the design of online interactive exercises so that both instant and delayed feedback can be provided. Further, when a student submits online homework, for example, his/her learning record is stored in the backend database so that instructors can track each student's learning process.

However, because of the limitations of current technology, the online course content is mostly related to receptive skills involving reading and listening where instant feedback can be provided. Little content and functions are provided for practicing speaking skills, though writing exercises are provided with no instant feedback. In the latter case, students' writing samples are collected and made available to teachers for later evaluation. Feedback in this aspect is delayed and still involves individualized attention.

3. User online behavior

3.1 Data collection and analysis

NHCE has been made available to about 100 universities and colleges in China since the summer of 2002. User statistics in Apache web server log format has been collected between September 2002 (when the learning system was first made available to users across the country) and December 2002, whose file size is about 2GB. Our following analysis is based on statistics generated by the free AWStats (Advanced Web Statistics, http://awstats.sourceforge.net) web log analyzer, which is distributed under the GNU General Public License (http://www.gnu.org/copyleft/gpl.html).

3.2 Results

3.2.1 Visits, page views and hits

Table 1 lists the number of visits, page views and hits on a monthly basis. Explanation of the terminology can be found at http://awstats.sourceforge.net/docs/awstats_glossary.html. Based on data in the table,

BEST COPY AVAILABLE

we can calculate that a visitor on average checks out 43 pages with 107 hits per visit.

Table 1 Number of visits, page views and hits

Month	No. of visits	Total pages views	Total hits
Sep-02	7988	232294	644077
Oct-02	24565	829020	2145063
Nov-02	27394	1412908	3433689
Dec-02	25529	1224183	2936155
Total	85476	3698405	9158984

3.2.2. Visit durations

Table 2 lists visit durations to the website by its users on a monthly basis. Note that in the table visits that last less than 2 minutes are not listed, since most likely they originated from search engine robots or spiders.

Table 2 Visit duration (Number of visits)

Month	2mn-5mn	5mn-15mn	15mn-30mn	30mn-1h	1h+	Average duration (minutes)
Sep-02	1478	1356	688	707	545	12.7
Oct-02	4347	4495	2311	2285	1888	13.6
Nov-02	4438	5521	3114	3091	3094	17.2
Dec-02	3973	5129	2758	2759	3093	17.3

If we represent those visit durations in terms of percentages (Figure 4), we find that about 50% of users spend more than 15 minutes per visit. Further, the average duration is more than 17 minutes in the later half of the four months period.

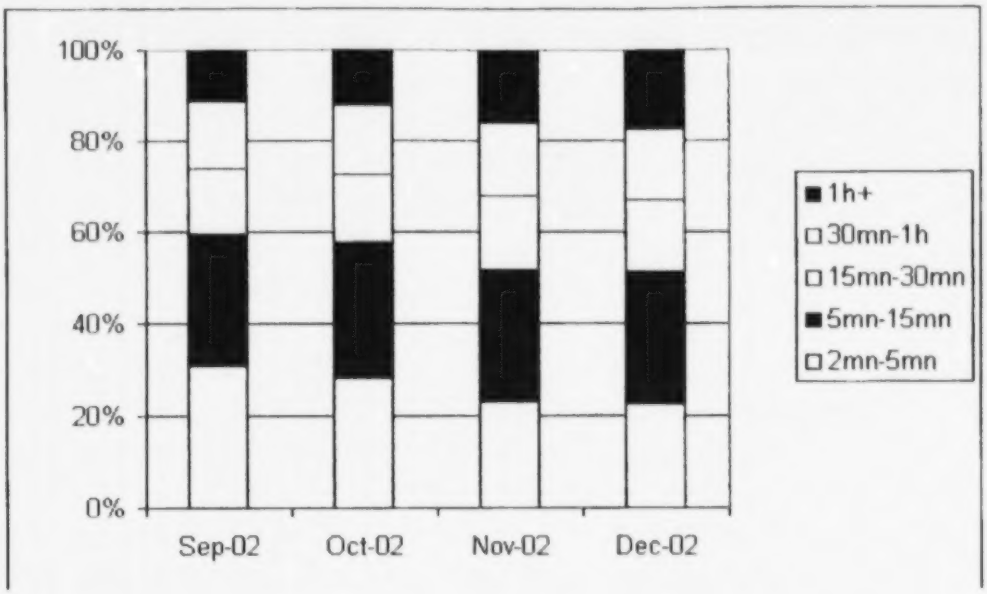


Figure 4 Visit duration represented as percentages

3.2.3 Most frequently viewed pages

Table 3 lists unique pages viewed (as measured in terms of unique URLs excluding query strings) on a monthly basis.

Table 3 Unique pages viewed

Month	Unique page views
Sep-02	1426
Oct-02	2536
Nov-02	3575
Dec-02	3757

A closer examination of all the pages viewed indicates that only three pages received more than 10,000 views per month, which include the login page, the interactive exercise page, and the table of the content page for the online course book (book homepage). Table 4 lists the total number of views of those three pages on a monthly basis.

Table 4 Top three most viewed pages

month	The login page	The interactive exercise page	The book homepage
Sep-02	24368	26867	5308
Oct-02	85398	63436	23560
Nov-02	140882	87912	47988
Dec-02	115141	109571	43655

As can be seen from the table, when users login to the website, they also visit the interactive exercise page on a very frequent basis. For each viewing of the online book's table of content page, they check out the interactive exercise page twice as often. Such a pattern can be clearly seen in Figure 5 (which is based on data from Table 4).

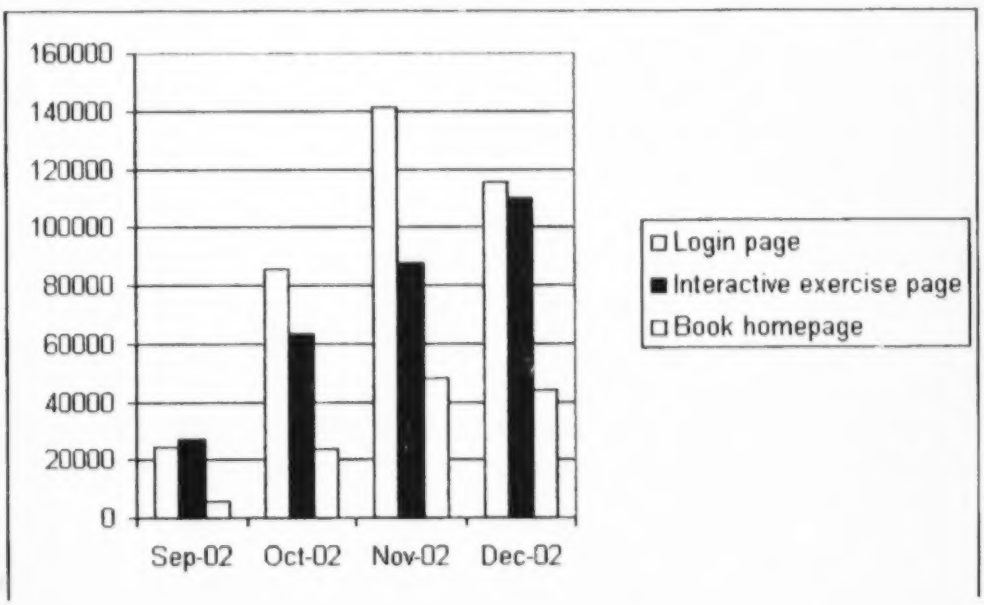


Figure 5 Page views of the login page, the interactive exercise page and the book homepage

4. Discussions and concluding remarks

From the web statistics presented in the above section, we find that NHCE users do make use of the learning system. On average, they check out 43 pages and spend 17 minutes online per visit. When they login to the system, they will also frequently check out the interactive exercise page. This is roughly twice as often as they navigate to the table of content page of the online course book.

Such a usage pattern is not out of our expectation. An examination of the online ESL learning system itself suggests that the majority of its interactive learning materials are on the acquisition of receptive skills such as reading and listening. After all, with current scripting technology, it is easier to develop online interactive materials that focus on receptive skills (such as reading) where instant feedback can be provided. For example, written multiple choice questions or cloze exercises are often used to check learner's reading comprehension. Students' responses to those types of questions can be processed readily using current server-side scripting technology. In contrast, speech processing technologies are not yet mature enough to handle interactions between the learner and the computer via the audio/video channels.

Given the availability of interactive learning materials such as those provided by NHCE and accompanying online learner behavior, we suggest that classroom-based foreign language instruction can make full use of the advantages that current technology provides. For example, by using NHCE an instructor can reduce classroom time on reading and listening training and pay more attention on speaking and writing skills. Such re-focusing of classroom instruction on productive skills is feasible because: 1) With the help of the interactive learning system, students can learn on their own to acquire those receptive skills. Spending less time on receptive skills in classroom will not adversely affect students' acquisition of those skills; and 2) Students' online learning process can be constantly monitored by the instructor via the tracking functions of the online learning system.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

[X] This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

[ ] This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").